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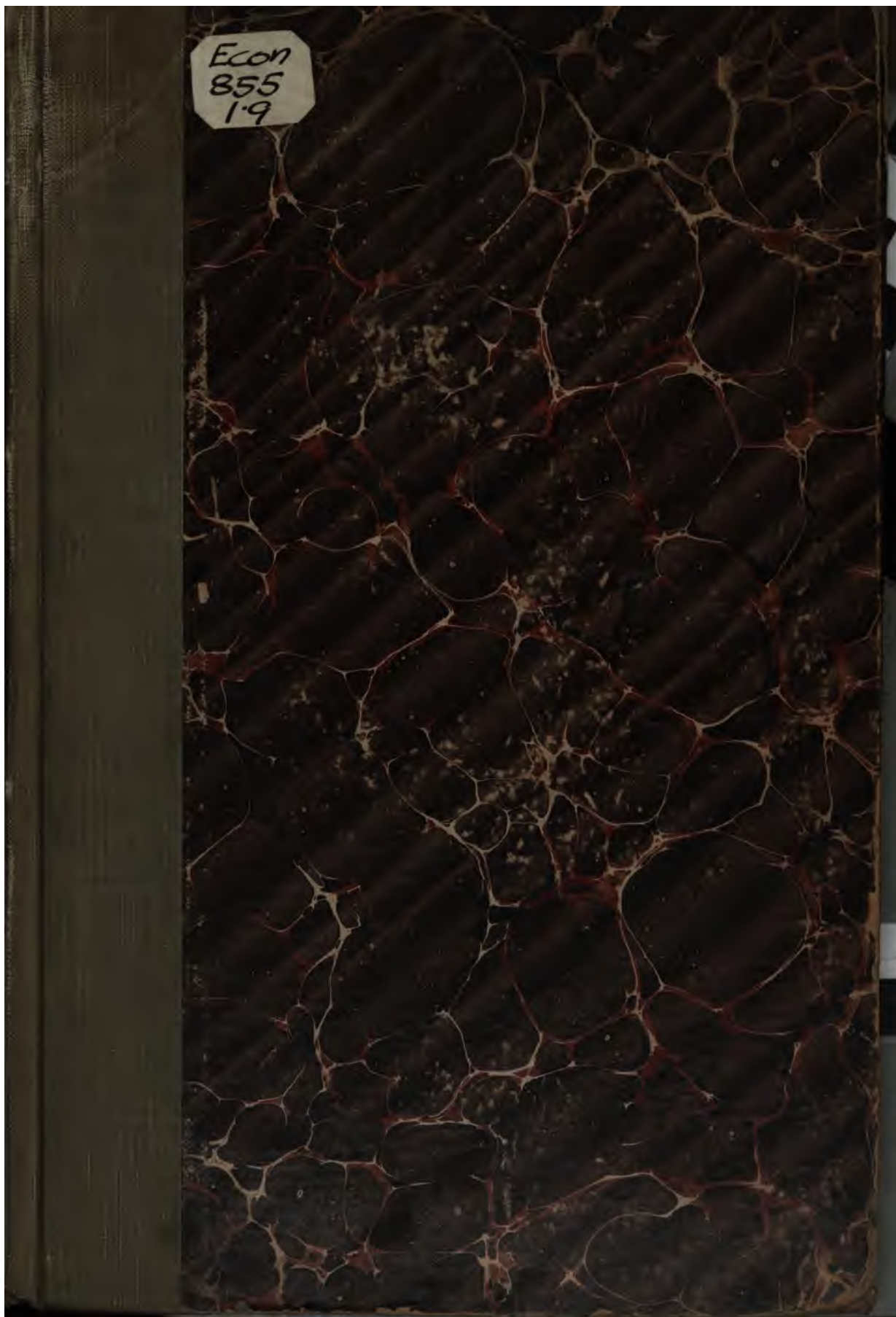
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FROM

Prof. F. W. Taussig

ECONOMICS

**A LECTURE DELIVERED AT COLUMBIA UNIVERSITY
IN THE SERIES ON SCIENCE, PHILOSOPHY AND ART
JANUARY 22, 1908**



ECONOMICS

BY

HENRY ROGERS SEAGER

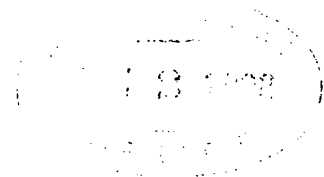
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ECONOMICS

WHEN Professor Crampton finished his lecture on Zoology a few weeks ago and it was understood that the social sciences would next be taken up, some one in this audience said: "Now they will begin to talk about what they don't know." Whether my immediate predecessor overheard this remark, I cannot say. If he did he replied to it in a way that it would be vain to try to imitate—by showing that to hear about what is not known may be quite as instructive and even more entertaining than to hear about what is. With Professor Robinson's revelations in regard to the deficiencies of History still ringing in my ears, like a call to the confessional, I have no desire to make extravagant claims for *my* subject. We economists do still talk about what we don't know. We have reached a stage, however, when with clear utilitarian purpose we talk more and more about what we should like to know, a good deal about what we hope to know, and a little, a saving little about what we think we do know.

Economics, or Political Economy, is the social science which treats of all of the interests and activities connected with the mundane task of earning a living. It is the social science of business. This definition, accepted in substance, if not in form, by all present-day economists, was reached only after prolonged discussion. Passing over the first beginnings of economic speculation in oriental and classical literature, we find that in Europe in the Middle Ages the subject was cultivated as a branch, not of political science,

but of ethics. The questions most actively discussed by mediaeval thinkers turned not on the explanation of economic phenomena, but on their justification. Thus the inquiry was not as to why the rate of interest charged at the time was high, but as to whether there was moral justification for charging any interest.

As the mediaeval restraints on trade and industry were relaxed the discussion of economic phenomena passed from theologians to merchants and government officials. Taxation, the control of monetary systems, and the regulation of commerce were the principal matters considered in the fifteenth, sixteenth, and seventeenth centuries and some progress was made toward an understanding of these subjects.

In the latter part of this period economic questions began to be approached from the standpoint of the whole people rather than from that of kings or the ruling classes; a change that was at first justified more on the ground that an impoverished people means an impoverished sovereign, — *pauvres paysans, pauvre Royaume, pauvre Royaume, pauvre Roi*, as Vauban writing in 1717 expressed it—than because the welfare of the people was squarely recognized as of primary importance. When Adam Smith published his "Wealth of Nations" in 1776 this broader conception was firmly established, but Adam Smith himself still thought of Political Economy as the art of making nations wealthy and prosperous, rather than as the science of explaining wealth and prosperity.

It was not until the first quarter of the nineteenth century, when Political Economy had been dignified in England by recognition as a college discipline, that the subject began to be defined and treated as a science. The materials for the new science had all or nearly all been brought together earlier, but it required Ricardo's combination of business experience and talent for abstract

reasoning, James Mill's passion for clear and logical exposition, and the leisure for academic refinements of analysis enjoyed by Malthus and Senior to bring the different parts of the subject together into what is now designated as the classical or orthodox system. That system has influenced so profoundly the course of economic thought even down to the present day that a brief exposition of its leading principles must be given.

To understand the classical system it is necessary to study it in connection with the industrial situation in England at the time that it was formulated. Though exhausted and impoverished by the Napoleonic wars, that country was throbbing with the great economic changes brought about by the inventions and discoveries of the last half of the eighteenth century. Manufacturing industries were growing at an unprecedented rate. Population was beginning to be concentrated in Yorkshire and Lancashire where the coal and water power called for by the new processes were to be had abundantly. The capitalist-employer was coming forward as the directing spirit in the new industries and the opposition between his interests and those of the landholding aristocracy, which still dominated Parliament, was beginning to stand out clearly. Finally, in consequence of the war and of the partial suspension of the country's foreign commerce, high prices prevailed for agricultural products, and not only did the landlords of the country enjoy unusually high rents from their estates, but a considerable extension of agriculture to lands that had before been deemed unfit for cultivation was observable. The interest of landlords in a continuance of these high prices was as clear as was the interest of other classes in bringing about their reduction.

It was on the background formed by these industrial conditions that Ricardo and his disciples, combining subtle reasoning with heroic abstraction from the complex facts

of life, sketched the closely related theories which for a time seemed to raise economics to the position of an exact science.

The factors in the production of wealth which the classical economists distinguished—land, labor and capital—corresponded to the three great social classes of the period, landlords, wage-earners, and capitalist-employers. Each of these factors was supposed to receive a share in the products of industry, the familiar rent, wages and profits. To explain these shares was, as Ricardo declared in his epoch-making treatise, “the principal problem in Political Economy.”

Rent, the share of the landowner, was explained very simply as a differential return due to the superior fertility or the superior location of the better pieces of land as compared with the poorer.

The explanation of wages was more complex, since two different and supplementary theories, one, applying to short, the other to long periods, were advanced. Over short periods wages were believed to depend upon the proportion between the accumulated fund of capital and the number of wage-earners. This was the famous wages-fund theory which was still confidently held by John Stuart Mill when he wrote his “Political Economy” in 1848. As stated by Mill, the theory is that “wages depend not only upon the relative amount of capital and population, but cannot be affected by anything else. Wages (meaning, of course, the general rate) cannot rise but by an increase of the aggregate funds employed in hiring laborers, or in a diminution of the number of competitors for hire; nor fall, except either by a diminution of the funds devoted to paying labor, or by an increase of the number of laborers to be paid.” This theory of the rigid dependence of wages upon capital, with the practical conclusion deduced from it that neither labor organizations nor factory acts could do

anything to improve materially the lot of wage-earners, served more than any other part of the classical system to earn for economics the title of "dismal science." That this theory, at one time universally accepted, is now universally condemned, may be cited as a solemn warning against over-confident generalization touching phenomena too complex to be explained by any simple formula.

To account for the course of wages over long periods the classical economists relied on the Malthusian doctrine of population. Population, they thought, is constantly pressing on the food supply. Any increase in the wages-fund tends to encourage an increase of population. In the long run wages tend to correspond with the standard of living of the wage-earning masses, the standard of subsistence, that is, which wage-earners insist on having in the sense that when wages fall below this level the growth of population will be checked until they are brought again up to it. Malthus at first thought that this minimum standard was no more than the subsistence absolutely necessary to enable the wage-earner to rear a family, and that misery and vice were the divinely ordained means of maintaining the necessary balance between population and the food supply. Further thought convinced him and the other classical writers that the standard of living is elastic and that wages determined by what later came to be called their "iron law" were not necessarily low wages. They continued, however, to think of wages in terms of food and to make little real allowance for the development of higher wants on the part of the masses.

Ricardo's explanation of profits, the third and last share, was the least satisfactory part of his "Political Economy." Instead of attacking the problem of the reason for profits directly, he had recourse to the method of difference for his explanation. Having asserted that all wealth annually produced is divided into three parts, and having explained

how the parts called rent and wages are determined, it seemed to him sufficient to declare that whatever was left over must constitute profits. It remained for Senior to attempt to explain the why of profits on independent grounds and he did this by formulating clearly the so-called abstinence theory, hints of which are to be found in the discussions of earlier writers. According to this theory the abstinence of the capitalist bears the same relation to profits as does the effort of the laborer to wages. Both are elements in the cost of production, and both must be recognized as ultimate factors in the determination of economic relations.

In the completed form to which it was brought by the work of Senior, the classical system had at least the merit of simplicity. The production and distribution of wealth seemed to be completely explained by half a dozen clear-cut propositions. From them seemed to follow by inexorable logic the principle that governmental interference with industrial relations must prove futile, even when not positively harmful. And so persuaded were the classical writers of the correctness of their doctrines that during the fifty years from 1820 to 1870 most of their attention was devoted to the task of winning disciples.

Already in 1821, James Mill brought out an "Elements of Political Economy," based on lectures first delivered *in camera* to John Stuart when in his twelfth year. About the same time a more ambitious effort to popularize economics was made by a Mrs. Marcet, the author of a successful "Conversations on Chemistry." Her "Conversations on Political Economy,"—a treatise in which a "Mrs. B." gravely expounds all the mysteries of the classical system in reply to queries propounded by an ingenuous young maiden, Caroline,—was received with approval by the leading economists of the day. Even J. R. McCulloch, the narrowest, most dogmatic and most prolific of the

classical writers, condescended to say that "the little work, though puerile in its form and from a female pen, is not wanting in manly excellence."

But perhaps the clearest proof of the confidence with which the teachings of Ricardo were accepted is the part which our own broadly cultured Professor McVickar played in this effort to popularize economics. In 1835 he was moved to bring out a "First Lessons in Political Economy for the Use of Primary and Common Schools," and to introduce the work with the following significant sentences:

"The first principles of Political Economy are truisms which a child may understand, and which children should therefore be taught. In the last century they were among the speculations of the learned; they have now become the heritage of the nursery; and the only difficulty in teaching them in after life arises from a suspicion excited by their very simplicity."

To the modern reader another possible explanation of the "suspicion" to which Professor McVickar alludes suggests itself when he discovers that among the "truisms" which had become the "heritage of the nursery" are the labor theory of value and the *laissez-faire* theory of government.

Much more fruitful than these attempts to popularize economics were the applications that were made of the classical theories to the economic and political problems of the day. For, however inadequate these theories may seem as a basis for solving the world problems of the twentieth century, it cannot be denied that they supplied a veritable arsenal of arguments for attacking the problems which confronted England during the period of their greatest influence. In fact, the inadequacy of the classical theories—if we except the wages-fund theory, the most serious, not to say vicious error of the older writers—came from their being only half-true rather than untrue. For the most

part they have been supplemented rather than superseded by the theories formulated since 1870. Among the practical reforms in England which should in justice be credited to the classical economists and their disciples were the establishment of the gold standard, the reform of Parliament, the reform of the poor law, the abolition of slavery and the repeal of the corn laws. It was not until these reforms were accomplished that any serious effort was made to re-examine the accepted theories and adapt them to changing industrial conditions.

The arguments which served at length to discredit the theories of the classical system were advanced by at least five different types of thinkers. First, there were the moralists who attacked the system on the ground that the industrial society to which its theories applied stood self-condemned. They ridiculed economics as "the dismal science" and insisted that the "economic man" of whom the economists prated existed only in the imaginations of these "closet philosophers." Not a little encouragement to this line of criticism came from the economists themselves. Thus, John Stuart Mill broke so completely with the principles that he had himself expounded that before his death he became an avowed socialist. Even Cairnes, who made an effort as late as 1874 to rehabilitate the classical theories, showed so little enthusiasm for his task that he declares that co-operation "offers the sole escape from a hopeless situation." With such damaging admissions coming from the leaders it was not surprising that there was dissatisfaction in the ranks.

The second group of critics were the socialists, led by Karl Marx. They professed to accept the teachings of Ricardo and asked only that his theories be followed to their logical conclusion. For them this was summed up in the proposition that all incomes except wages are the result of legalized robbery.

More important was the third line of attack, the accumulation of facts both past and present by disciples of the German Historical School. These showed not only that the premises which the economists advanced as universally true applied only to a few countries, and to them only at particular periods of their historical development, but also that the conclusions which the economists deduced from these premises failed to correspond with experience.

The fourth influence was the progress of biological studies and the growing appreciation of the importance of change in connection with all forms of organic life. From thinking of human nature and social institutions as relatively fixed, all students of social phenomena were led to think of them as undergoing a gradual evolution. This new conception was obviously inconsistent with the hard and fast principles of classical economics.

Finally and most important of all was the more searching examination to which the economists subjected their own theories. Thornton and others attacked the wages-fund theory and succeeded in securing a formal recantation from John Stuart Mill, upon whose authority much of the later day vogue of the theory had depended. Menger in Austria and Jevons in England showed the inadequacy of the cost-of-production theory of value and proposed in its place the marginal utility theory, now very generally accepted. Our own Walker and others showed the necessity of recognizing other shares in distribution than the traditional rent, wages and profits, and thus prepared the way for a more accurate analysis. Similarly, the Malthusian doctrine of population and the abstinence theory of interest were shown to be untenable in the forms in which the classical writers had advanced them, and less simple theories having more regard to the complexities of the subject were proposed to take their places.

Through the combined operation of all of these influ-

ences the inadequacy of the classical system was proved both inductively and deductively, and the way was prepared for the more careful and scientific, if less confident and sweeping theories of economics which are now accepted.

In turning from this brief survey of the history of the science of economics to an account of present-day principles and problems, I am filled with renewed admiration for my predecessors who have succeeded in telling so much about their subjects in the limited time allotted to them.

Although it is one of the newest of the sciences, economics has already been subdivided into many special branches, to any one of which a lecture such as this might profitably be devoted. Statistics, mathematical economics, economic theory, public finance, practical economics, economic history, and social economy are the branches at present represented through special courses or series of courses offered at this University. In each of these notable progress is being made. Not only is our mastery of the essential facts in regard to industrial conditions in this and other lands becoming every year more complete, but greater care is constantly being exercised in the formulation of the premises to be used in economic reasoning and in the application of theoretical conclusions to practical problems. Notwithstanding this progress, the present state of development of the science is still one of transition. The dogmatic orthodoxy of the past has been succeeded by an exuberant heterodoxy which gives so great prominence to the disagreements among economists that the agreements are easily overlooked. This disputatious period is gradually passing in its turn and a new body of principles is emerging which entitles economics still to be regarded as the most exact of the relatively inexact social sciences.

One of the chief difficulties with which economists have all along contended is the inexactness of their terminology.

It is a significant indication of present tendencies that at the last meeting of the American Economic Association a standing committee was appointed on "agreements in political economy." The principal task assigned to this committee is that of formulating standard definitions of the more common economic terms. It is hoped that by this means a more truly scientific terminology may gradually be developed, which will not only contribute greatly to clearness of thought, but put an end to the merely verbal controversies to which in the past far too much attention has been given.

In the limited time that remains to me it will be impossible to deal with many of the phases of contemporary economics. Great as is the temptation to enter upon a discussion of those problems that are just now most prominently before us in the United States, the currency question, the railroad question, the trust question and the tariff question, I feel that I shall give a truer impression of the relative significance of different parts of economics if I pass them by in favor of problems pertaining to labor. For, as Professor Marshall has said, it is after all the question "whether it is really impossible that all should start in the world with a fair chance of leading a cultured life, free from the pains of poverty and the stagnating influences of excessive mechanical toil * * * * * which gives to economic studies their chief and their highest interest." To explain why and in what respects the present attitude of economists toward labor problems differs from that of the classical writers, I must begin where I left off in expounding their theories,—with the problem of distribution.

The explanation of the division of the annual products of industry into the shares into which they are distributed, that is now widely, though not yet universally accepted by economists, is conveniently designated as the "productivity

theory." According to this theory as it applies, for example, to the share of the annual produce that goes to wage-earners, it is not the fund of wealth that has already been accumulated that determines wages (as held by the wages-fund theorists), but rather the flow of wealth which is being currently produced. Employers, when deciding what wages they can afford to pay, consider not the capital which they happen to have, but the probable value of what their employees will produce. Having decided what their employees are worth to them, or, what is the same thing, what the part of the product attributable to their labor is worth, they, of course, try to secure their services for less. If competition is perfectly free, however, and employees are alert to their own interest and willing to shift from one employer to another for the sake of higher wages, the competitive demand for labor among employers will force wages up until there is little margin between the wages paid and the value of what labor produces.

In the same way that it tends to assign to wage-earners the share of the product that is imputable to their labor, the free play of competitive forces tends to assign to land and the other instruments of production their respective shares of the joint product. This does not mean, of course, that the tendency of free competition is to deprive employers of their profits. The productivity theory makes full allowance for ordinary profits, or wages of management, and also for the additional profit or loss which falls to the employer because he assumes the risks of business. It asserts merely that competition tends to cause all the different shares in distribution to correspond to the parts of the product that are economically imputable to the services which the corresponding factors render in production. The explanation of the process by which this economic imputation is carried out amidst the complexities of modern business relations is one of the most difficult tasks of economic analysis. For

proof that it is carried out, I must refer you to the technical manuals, of which, as President Butler once said of small colleges, three are supplied by Columbia.

In accepting the productivity theory of competitive distribution, economists do not ignore the fact that the assumed state of perfectly free competition is very far from being realized in actual industrial society. They recognize fully that monopoly, to mention only one complicating factor, plays an equally important rôle with competition in determining actual distribution. Thus the laws of competitive distribution are merely a point of departure for studying the problems of actual distribution. To understand the latter, allowance must be made for the element of friction in economic life in somewhat the same way that such allowance is made in physics in applying the laws of motion to the actual movements of falling bodies. The chief difference is that in economics the element of friction is often of such dominating importance that the utility of the explanation of what would happen if competition were free is sometimes questionable.

Recognizing fully the limited application of the productivity theory, I nevertheless believe that acceptance of it has been an important factor in changing economics from a "dismal science" to a science full of promise for the future of industrial society. Merely to assert that wages depend fundamentally upon what the wage-earner produces is to make an appeal to the ambition and enterprise of the working masses. If wages are low, a certain way to raise them is to make labor more efficient. Thus the interest of wage-earners becomes identical with the interest of the whole community. Rising wages mean an increasing output of wealth on the part of wage-earners. They are not opposed to the interest of any other class—to that of employers, of capitalists, or of land-owners. On the contrary, the increasing wellbeing of wage-earners

means increased wellbeing for all classes. Thus all should unite in promoting plans for the better education and training of the world's workers, and the benefits which will flow from such efforts will be cumulative, because the higher earnings of the more efficient workers of one generation will almost inevitably be used in part for the benefit of the workers of the next.

The acceptance of this theory has also led to a clearer analysis of the part which capital plays in production. The classical economists when they spoke of capital habitually thought of the imaginary wages-fund. The principal function of capital to them was to feed and support the laboring masses while they were devoting themselves to the production of unfinished forms of wealth. To modern analysis the principal function of capital is to supply the tools, machines, railroads, factories, and other instruments which so enormously increase the productiveness of industry. While denying the existence of a special wages-fund, economists do not of course ignore the fact that it is a second function of capital to make possible the elaborate division of labor and the roundabout methods of production, which in their turn contribute so largely to the productiveness of industry. In order that production, distribution and consumption may go on regularly and continuously, a vast accumulation of wealth in the form of raw materials and partially finished and finished commodities is necessary. By recognizing that it is the function of capital to supply the instruments of production as well as this fund of materials, economists now define the relation between labor and capital in a way that neither humiliates the workman nor belittles the importance of the part which capital plays in production.

A third important consequence of acceptance of the theory that wages tend to equal what labor produces is that economists have come to feel that this is the lowest

standard of remuneration that is compatible with justice. The worker is entitled at least to the full equivalent of what he produces. This is the moral principle which economists now very generally apply to the labor situations on which they have to pass judgment. Very often, perhaps more often than not, the ideal standard of the productivity theory is not realized in practice. Wages fall below, sometimes far below the fair equivalent of what labor produces. This may be due to the fact that a given branch of industry is controlled by a monopoly; to an open or tacit combination among employers not to spoil the labor market by bidding up wages; to the ignorance, inertia or timidity of wage-earners themselves; or to the fact that the advantages of industrial progress redound first to the benefit of employers and that it takes time for wages to be advanced so that the workers get their share. Recognition that some or all of these influences may prevent workmen from getting the wages to which, according to the productivity theory, they are economically entitled, has made economists much more sympathetic toward labor organizations than they used to be. From condemning them as useless, if not harmful, they have changed to approving them as necessary means of putting wage-earners in a position to bargain on equal terms with their employers. When the latter are giant, semi-monopolistic corporations, as is so commonly the case today, it is clear that the workmen stand little chance of getting a fair competitive wage unless they organize to oppose combination on the side of capital with combination on the side of labor. Thus, in place of the older conception of a competitive labor market in which isolated employers competed against one another in bargaining to secure the services of isolated and competing wage-earners, the present conception of a desirable labor situation is one in which honestly and intelligently directed labor organizations enter into collective

bargains with honestly and intelligently directed employers' combinations. It is believed that such a situation will not only result in fairer rates of wages, but that it will serve as an effective restraint on the embittered conflict between capital and labor which is now such a menace to continuous prosperity.

The same considerations that have led economists to approve of labor organizations have made them advocates of legislative interference to control the conditions of the labor contract. Reasonable laws regulating the working hours of women and children and prescribing standards of sanitation and safety for the benefit of all employees are today universally approved by economists. The legal regulation of the hours of labor of adult men is less generally demanded, but the industrial development of progressive countries is so clearly away from the situation in which effective individual liberty results from a policy of non-interference on the part of the government that the argument for protective labor laws for all classes is steadily gaining adherents. The object and tendency of such laws, as economists now recognize, are not to repress individual initiative and enterprise, but rather to determine the plane on which initiative and enterprise shall act. Enterprise which spends itself in devising new methods for sweating the last ounce of productive power out of underpaid and ill-fed employees serves no useful purpose. It is much better that the same energy and ingenuity be directed toward introducing more efficient tools and machinery or a better division of labor, wage-earners meantime being protected from over-work under unwholesome conditions by definite legal prescriptions.

Economists approve of trade unions and labor laws, because they recognize that their assistance is needed to protect wage-earners from the destructive effects of an unfair, because unequal, competition. But their program

on behalf of wage-earners does not stop here. Side by side with the principle that wage-earners are entitled at least to the full equivalent of what their labor produces, most economists would now put the further principle that wage-earners should be protected from losing through accident or misfortune the capacity to maintain the standards of living to which they have become accustomed.

Among the contingencies which frequently prevent the families of independent and self-respecting wage-earners from preserving their standards of living the principal are sickness, accident, unemployment, premature death and old age. One way of providing against these evils and the way on which the classical economists relied is for every wage-earner to accumulate an independent fund of capital. Desirable as would be such a development, no one can deny that the progress which wage-earners have made in this direction is exceedingly slight. Moreover it is not the most economical and intelligent way to meet these contingencies to which all are liable, but which the great majority escape in whole or in part. A better way is through the machinery of insurance, by which a common fund is created for the benefit of those who suffer from these evils at a minimum of expense to the larger number who are exposed to them.

Insurance against accidents, premature death and old age, and even against sickness, have long been furnished by commercial insurance companies. The trouble is that those who would be most benefited by this insurance are either indifferent to it or unable to bear the expense of securing it. Under these circumstances some plan of universal insurance at the expense either of the wage-earners to be benefited, of their employers or of the state, seems alone suited to the necessities of the situation.

Time will permit only the briefest reference to the different plans of universal insurance against these evils

which are being tried. Germany, as is well known, has developed a system of universal compulsory insurance against all of them except unemployment. The United Kingdom has recently extended its system of workmen's compensation for industrial accidents until it includes not only practically all employments, but also certain diseases contracted in connection with the occupation. Denmark, New Zealand and New South Wales have established old age pensions, and it appears probable that the United Kingdom and France will also establish them so soon as the additional revenues which they necessitate can be provided. Finally, certain German and Swiss cities have experimented with systems of municipal insurance against losses due to unemployment.

The point I wish to emphasize is that these measures, which to the classical economists would have seemed opposed to all of the principles of economics and sound statesmanship, are now approved in substance by a large and growing body of the younger generation of economists. More careful analysis and completer knowledge of the facts of industrial life have discredited many of the arguments which the older economists urged against such measures, and experience of the actual results that follow from them has shown how groundless was the fear that they would prove subversive of public order and good government.

The reasons for this change in the attitude of economists may be illustrated by taking up in a more concrete way one of these contingencies which it is proposed to provide against by some plan of universal, state-controlled insurance. The change in opinion in reference, for example, to industrial accidents is instructive. The older economists thought that competition would cause wages to be sufficiently higher in dangerous trades to compensate workmen for the risks they run. Wage-statistics prove

that this is not the case. The facts overlooked by the older writers were that wage-earners are both ignorant of and indifferent to the dangers to which they are exposed. But if wages are not higher in dangerous trades, workmen and their families ought to be protected in some other way against the losses industrial accidents entail. These losses are really portions of the cost of producing goods. Consumers, therefore, for whose benefit production is carried on should be made to pay for them. But consumers cannot be reached directly. The simplest plan is to throw the cost of workmen's compensation upon employers and depend upon them to pass it on to consumers, as they do their other expenses of production, in the form of somewhat higher prices for their products. Under this plan consumers pay for what goods cost in maimed bodies and shortened lives, as well as for what they cost in wear and tear of plant and used up raw materials. No one has reason to complain of the new policy and a great social evil is remedied.

As for industrial accidents, so for the other evils that have been enumerated, economists are now convinced that no merely individualistic remedies are adequate. The individual, even the intelligent individual, is too confined in his outlook and too blinded by belief in his own immunity to take the measures for his protection which the situation calls for. Such measures to be adequate must be comprehensive. Based on full knowledge of the social consequences of the evils to be remedied, they must be adopted as parts of a constructive policy of social betterment, and compulsion must be used to bend the will of the individual to what is so clearly for the general good.

Does this change in the attitude of economists in reference to labor problems mean that they are becoming socialistic? If "socialistic" is used to designate every departure from a rigid *laissez-faire* policy, then the economists of to-

day are undoubtedly more socialistic than were the economists of thirty or even ten years ago. Most economists, however, would draw a sharp distinction between the widened field of activity on which they desire to see the state enter and socialism. To eager socialists every step in the direction of a broader social policy appears to be a step toward their cherished goal. But it is a long road that has no turning. The road which progressive countries are now traversing is undoubtedly away from the narrow individualism of the past; but the novel social policies which are being tried in this country and in that may prove not advances toward socialism, but rather bulwarks against the revolutionary changes in our fundamental institutions of private property and freedom of contract which socialists advocate. It was with this deliberate purpose in view that Germany took the lead in this field of social legislation in the early eighties. And it is with this expectation that most economists have lined themselves on the side of such legislation. But it is a rash prophet who would attempt to say just how far the extension of governmental functions may go without narrowing, instead of widening, the field of effective individual liberty. One great change that has certainly occurred is that the cry of socialism has ceased to weigh with intelligent people as an argument against any proposed policy. The question which interests present-day economists is not whether a given measure is socialistic or individualistic, but rather whether, considering all its effects direct and indirect, it is socially expedient. In this spirit they welcome experiments along socialistic lines; but with a caution born of knowledge of past failures they prefer that the more radical of these experiments be tried by other countries first. This change is only part of the larger change that has occurred in all fields of thought. In desiring to see the contentions of socialists submitted to experimental proof, rather than

silenced by *à priori* objections, economists merely exhibit their kinship with scientists in other fields. They also distrust the absolutist temper and prefer the open mind.

In these lectures it has become the custom to say something about the motives which dominate specialists in the different fields of knowledge that are passed in review. As regards economics, the principal incentive of those who have most distinguished themselves in the science has certainly not been mere love of truth. Economists love truth, I hope, as ardently as the natural scientists. They also find outlet for their play instinct in the intellectual exercises afforded by the problems which they are endeavoring to solve. Were it not, however, that they hoped to contribute ever so little to the progress of industrial society toward a more satisfactory adjustment of its burdens and rewards, few would continue to devote themselves to a specialty which presents so many baffling and discouraging features. While not insensible to the ideals of scientific accuracy and fidelity to truth which inspire all honest scholarship, economists are, therefore, frankly utilitarian in their motives and aims.

Looking back over the development of their science during the last one hundred years, economists have many reasons for satisfaction. That the science itself should have made progress is a matter of course. What was not so inevitable is its increasing influence on other fields of thought and on practical policies. Historians, who used to stigmatize insistence on the importance of industrial history as narrow and doctrinaire, are now willing to concede everything that reasonable economists would claim for this special branch of investigation. As economists have grown more modest and more truly scientific, practical business men have become less prone to brush aside their arguments as "mere theory" and more ready to recognize that the social aspects of business also merit considera-

tion. Even more gratifying is the increasing part which economists are being allowed to play in the drafting of legislation and in the administration of laws whose enactment they have helped to secure. The appointment of economists on tax commissions, industrial commissions, trust commissions and labor commissions has become so common as now to be taken for granted even in the United States, where it is a very recent development. In fact, the appreciation in which economic studies are held is growing so general that there seems just now danger that too much, rather than too little, importance may be attached to the views of academic economists. When, as recently in a neighboring state, a judge of one of our highest courts solemnly declares that the time is at hand when the courts of last appeal will cite the writings of economists rather than legal precedents in justification of their decisions, the sense of elation that economists cannot but feel is tempered by misgivings as to their preparedness for this serious responsibility. The one reassuring thought which encourages them when they contemplate the extent of their ignorance is that which Professor Robinson threw out as a life preserver to support his historical colleagues through the flood of his destructive criticism. Little as economists know about economics, they at least do not know less than anybody else.

But the chief reason for the economist's satisfaction is, after all, the change in his own attitude in reference to social progress. The wages-fund theory and the Malthusian doctrine of population made economics seem a dismal science to the idealists of the first half of the nineteenth century. The theory of distribution that is now accepted and the practical measures which follow from it have changed economics into a science full of hopefulness for the future. Disagreeing still on some fundamental problems and on many of the practical applications of eco-

nomics, the economists of today are nevertheless gradually coming to agreement. Moreover, out of the clash of their conflicting opinions a definite program of economic reform is emerging, which promises to make them as effective in promoting a broad and liberal policy of social betterment in the future as they have been in some periods of the past in sincerely, but mistakenly, opposing every departure from a strict *laissez-faire* policy. Economics still lacks the charm for the scientific mind that comes from precision of statement and exactness of reasoning from premises to conclusion, but no one need now be deterred from studying it from the fear that it deals with colorless abstractions or leads to a jaundiced view of life. It is intensely human in its interest, and the goal of progress toward which it points is as full of promise of wellbeing for mankind upon this earth as have been the dreams of poets or the aspirations of philosophers in any by-gone age.

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